

FIG. 1

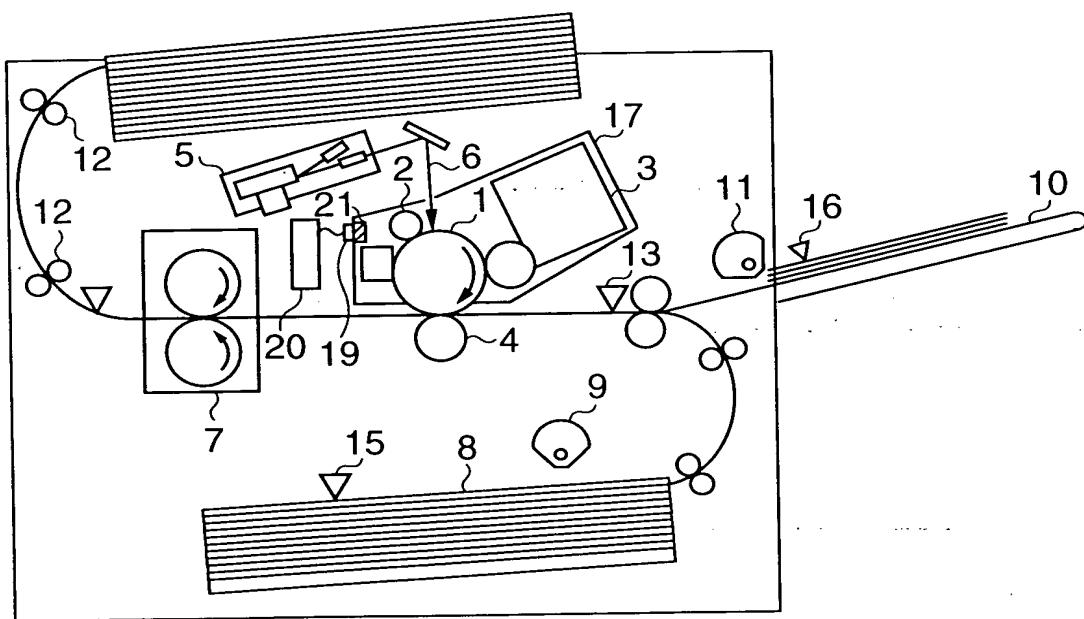
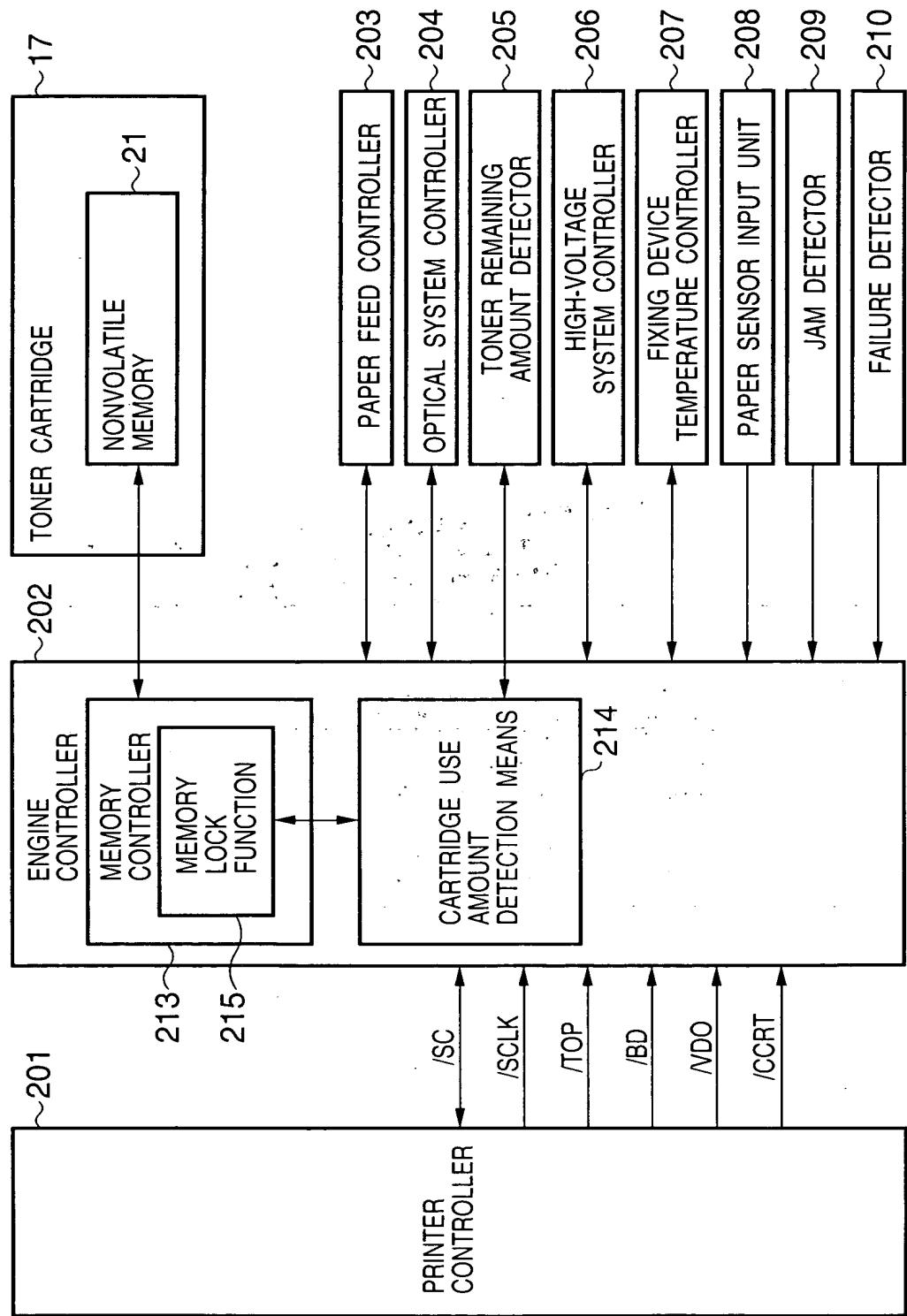


FIG. 2



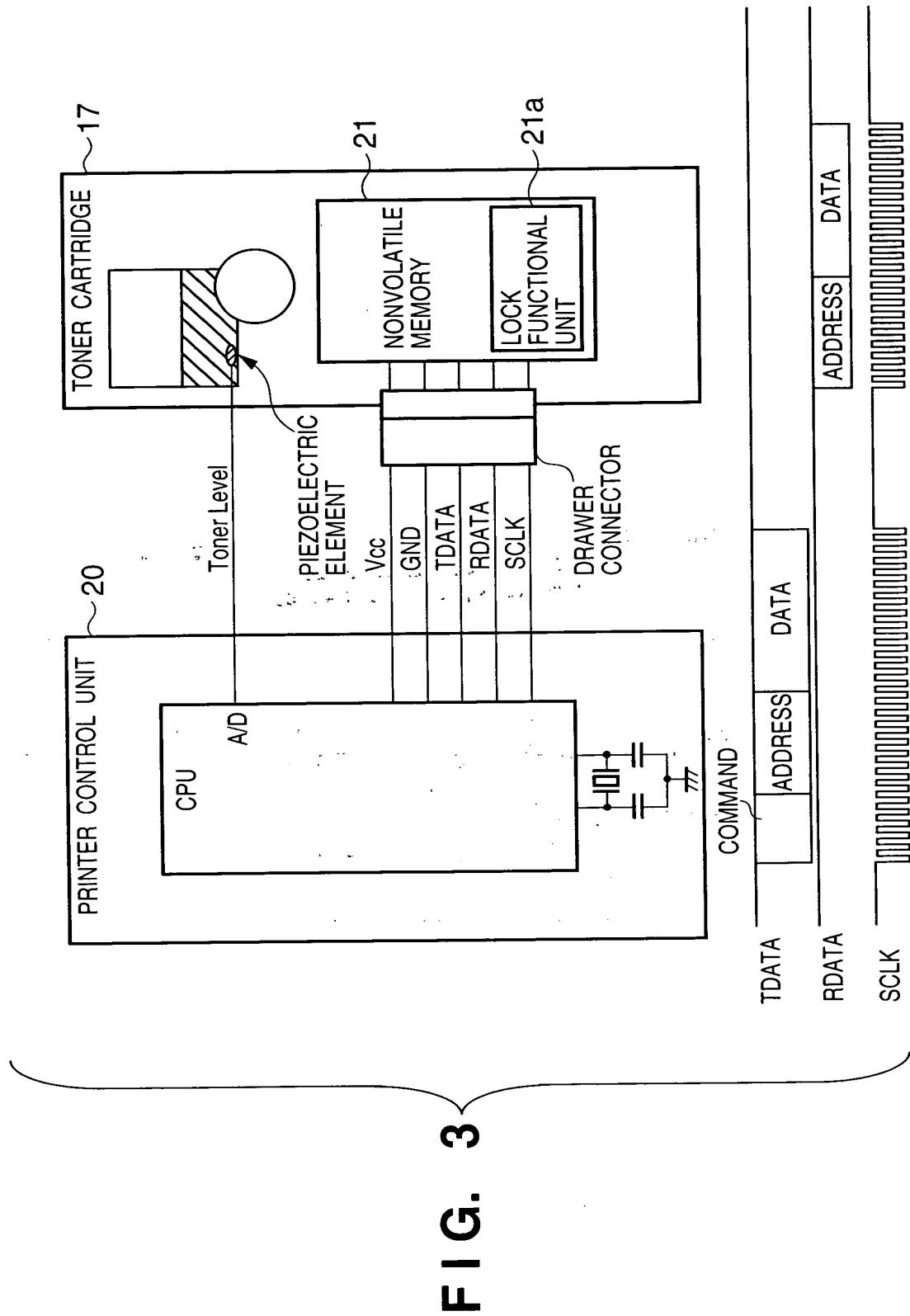


FIG. 4

ADDRESS NO.	ADDRESS	CONTENTS
1	000	MANUFACTURING NO. (LOT NO.) OF CARTRIDGE
2	001	UNUSED
3	010	UNUSED
4	011	UNUSED
5	100	CARTRIDGE TONER REMAINING AMOUNT
6	101	CARTRIDGE SERVICE LIFE EXPIRE INFORMATION
7	110	LOCK SETUP FOR ADDRESS NOS. 1 TO 4
8	111	LOCK SETUP FOR ADDRESS NOS. 5 TO 8

FIG. 5

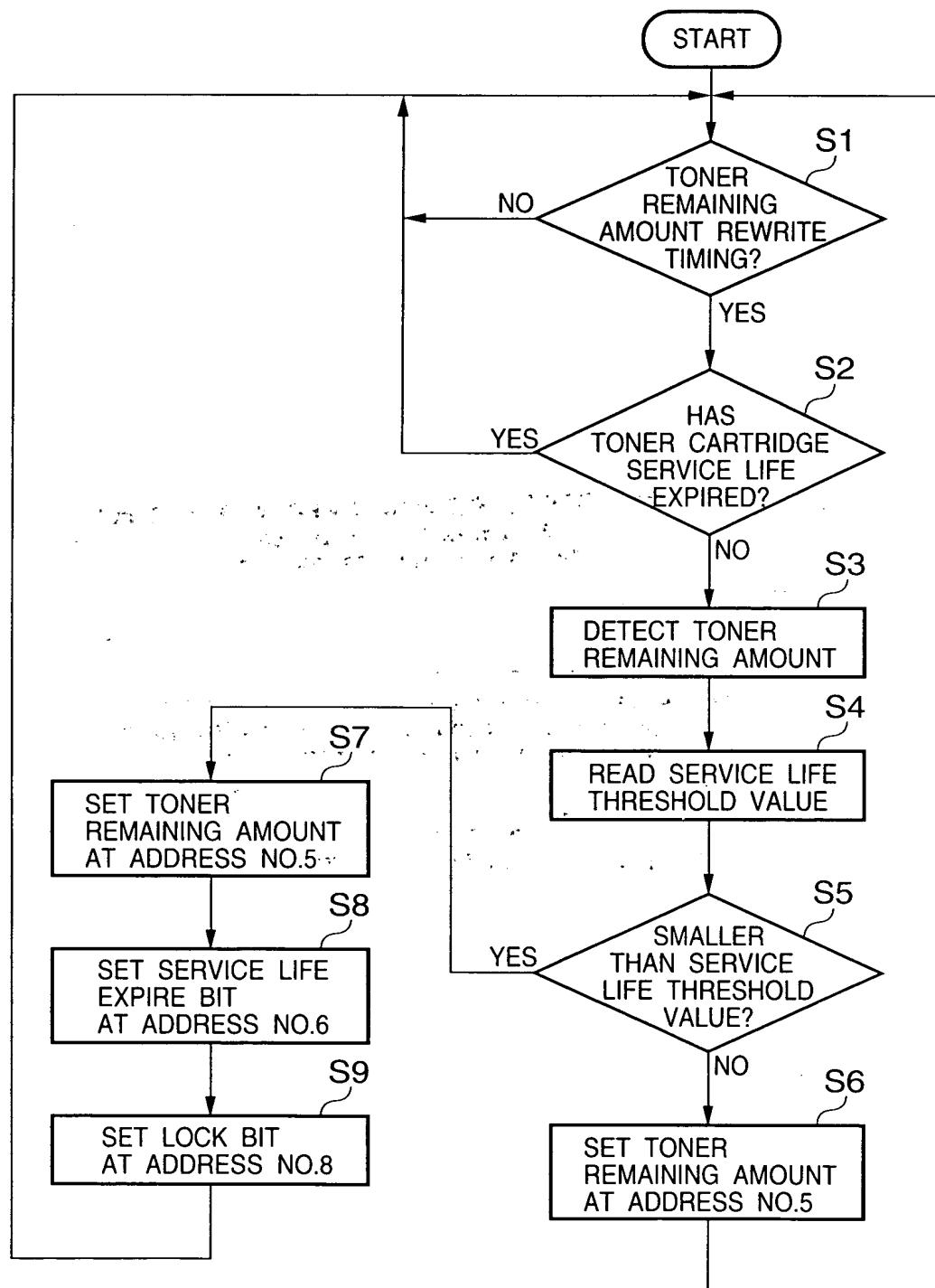


FIG. 6

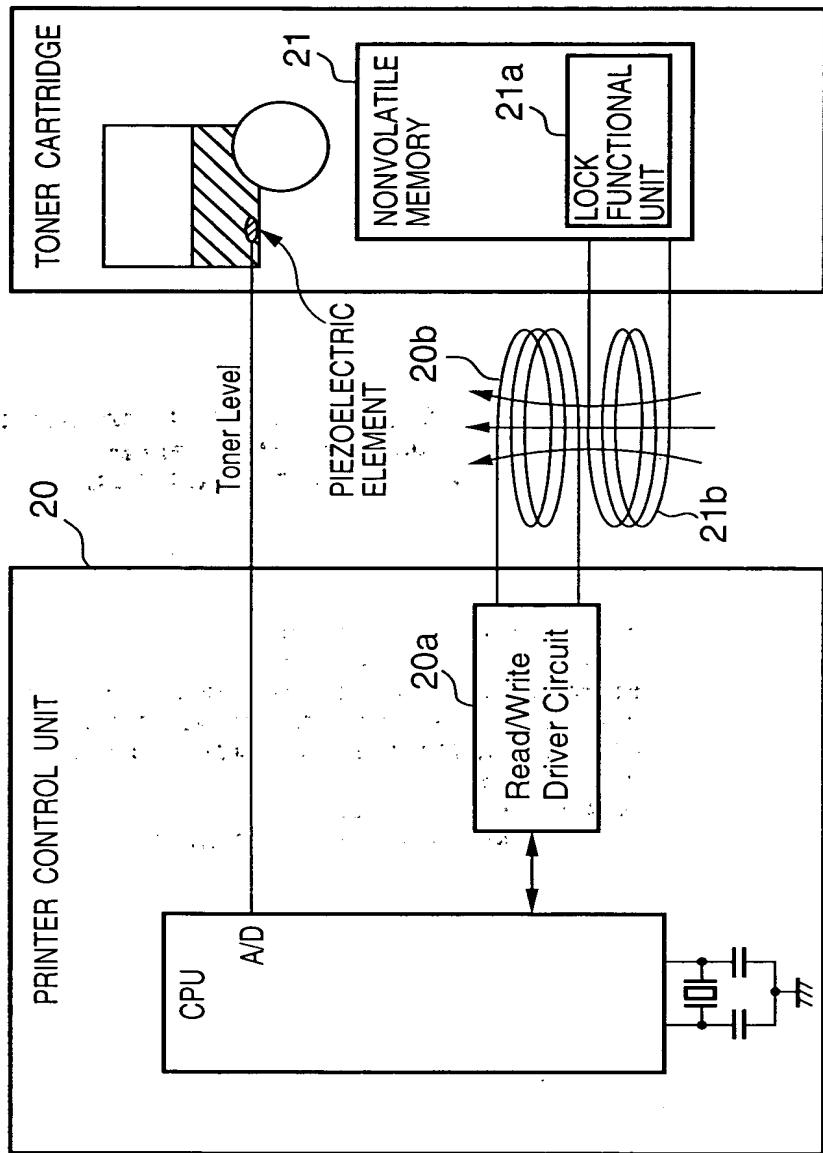
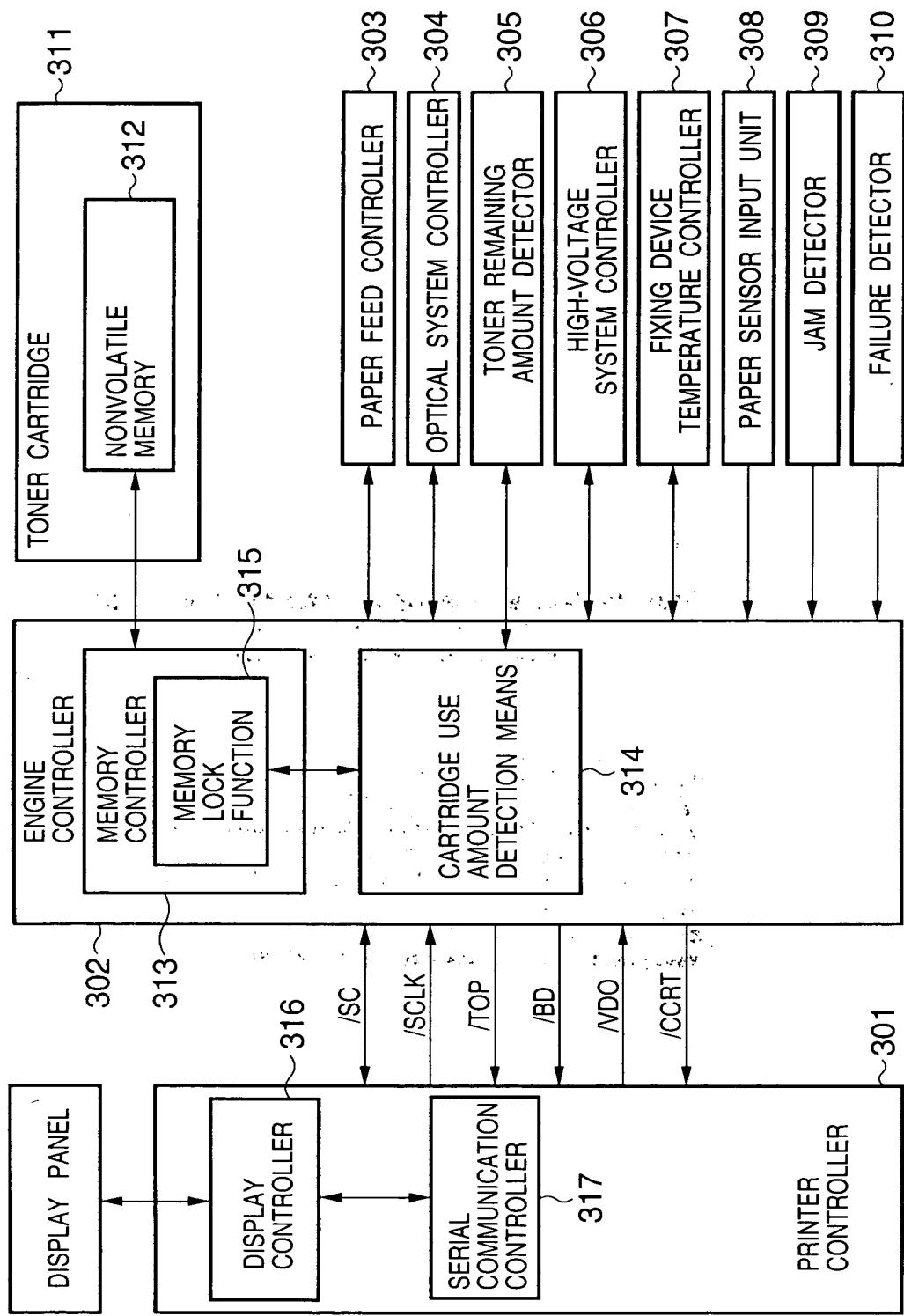
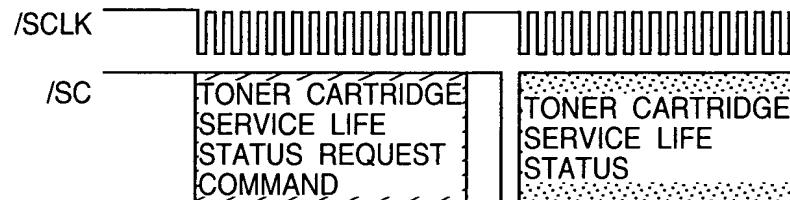


FIG. 7



## FIG. 8



TONER CARTRIDGE SERVICE LIFE STATUS

BIT	CONTENTS
1st BIT	0
2nd BIT	TONER CARTRIDGE SERVICE LIFE EXPIRE BIT
3rd BIT	UNKNOWN
4th BIT	UNKNOWN
5th BIT	UNKNOWN
6th BIT	UNKNOWN
7th BIT	UNKNOWN
8th BIT	PRINT COMMAND CODE $2^7$
9th BIT	PRINT COMMAND CODE $2^6$
10th BIT	PRINT COMMAND CODE $2^5$
11th BIT	PRINT COMMAND CODE $2^4$
12th BIT	PRINT COMMAND CODE $2^3$
13th BIT	PRINT COMMAND CODE $2^2$
14th BIT	PRINT COMMAND CODE $2^1$
15th BIT	PRINT COMMAND CODE $2^0$
16th BIT	ODD PARITY BIT

FIG. 9

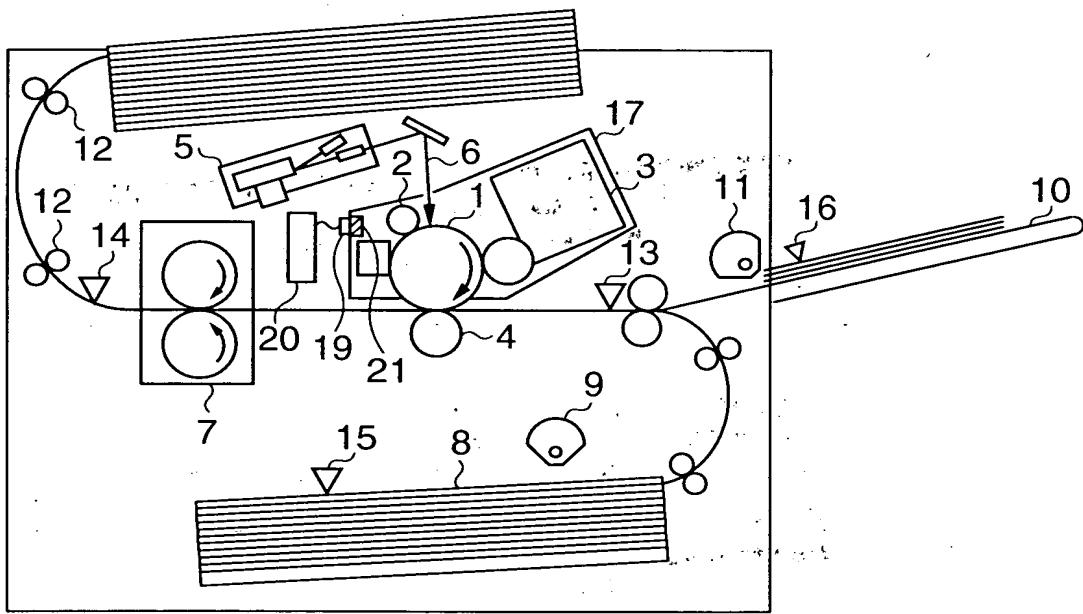
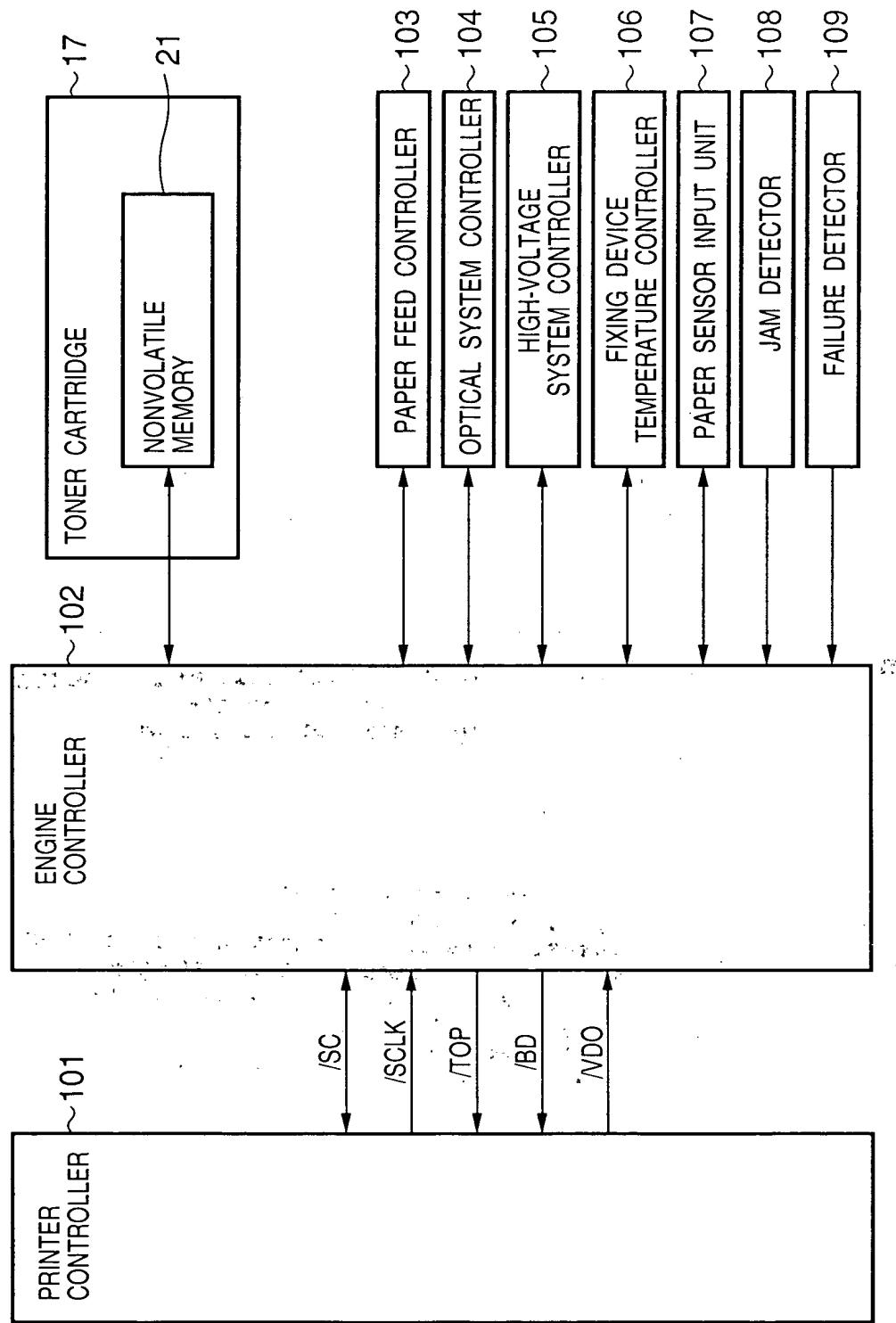


FIG. 10



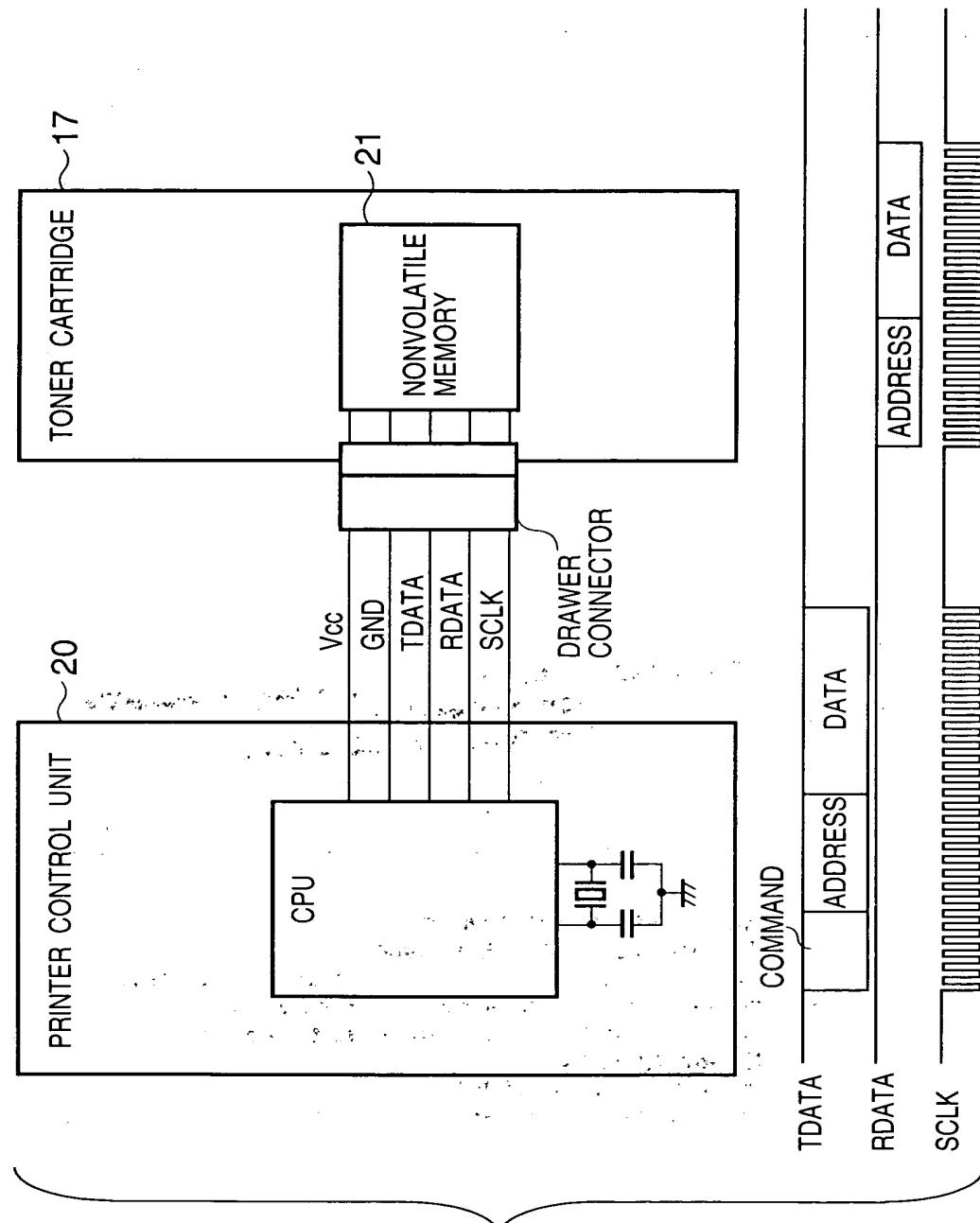


FIG. 11

COMMAND

TDATA	ADDRESS	DATA
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RDATA

SCLK

ADDRESS

DATA

FIG. 12

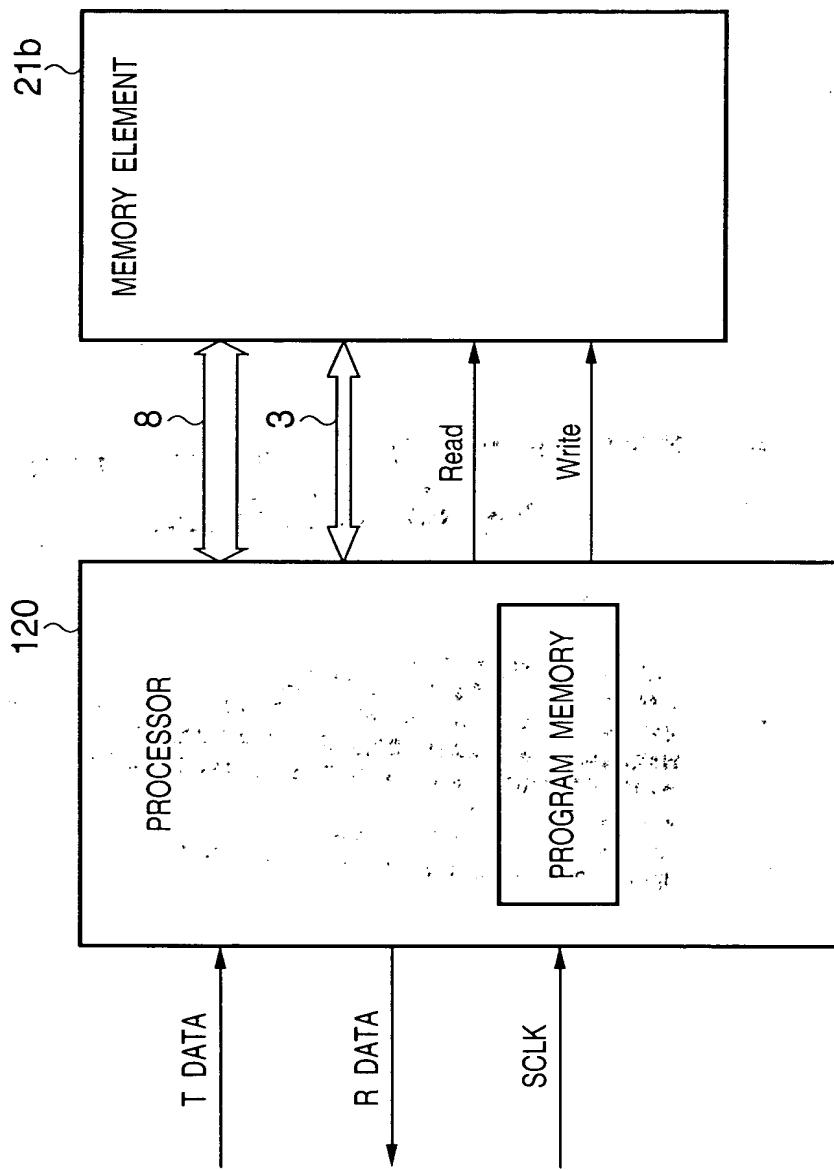


FIG. 13

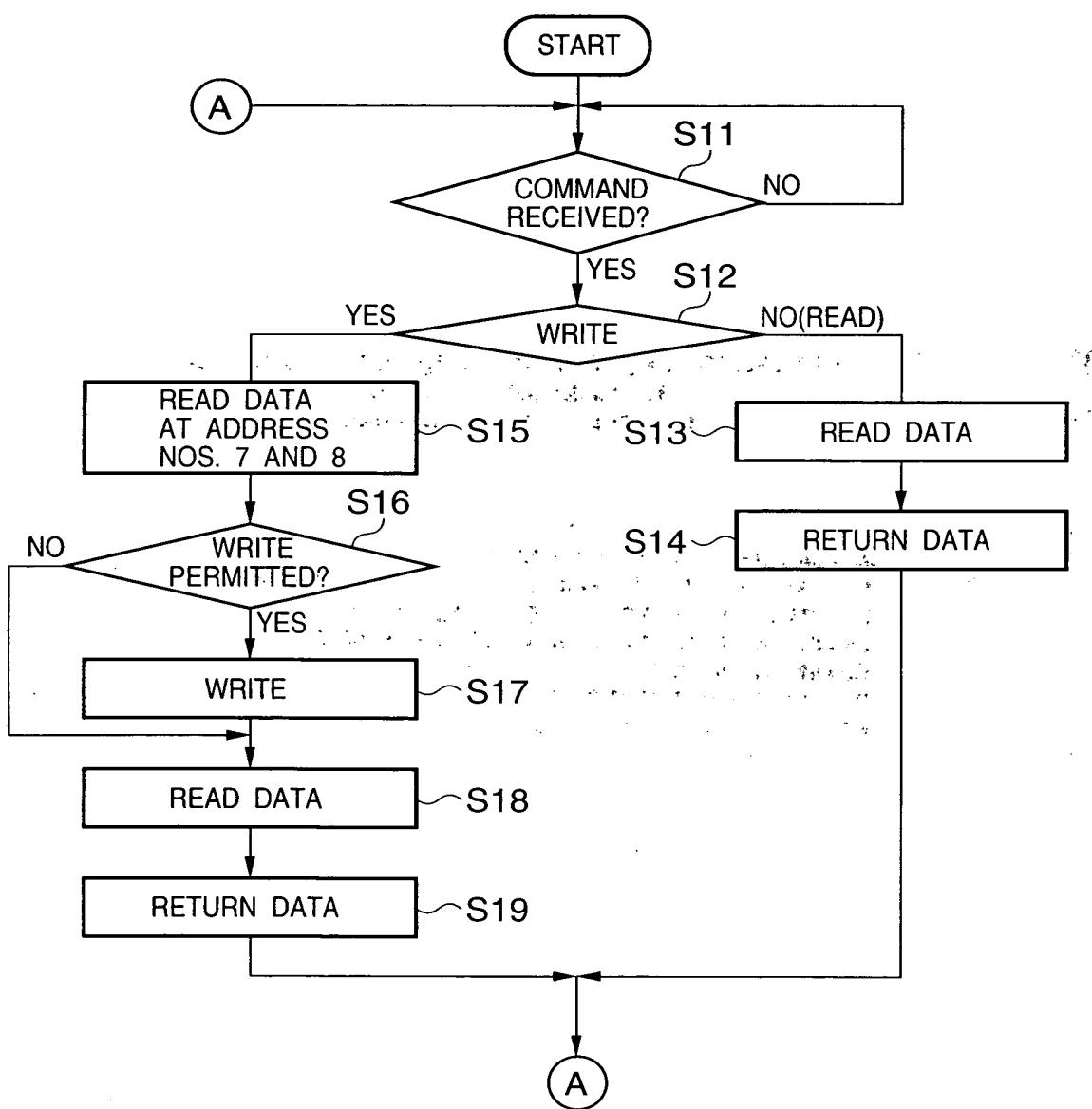
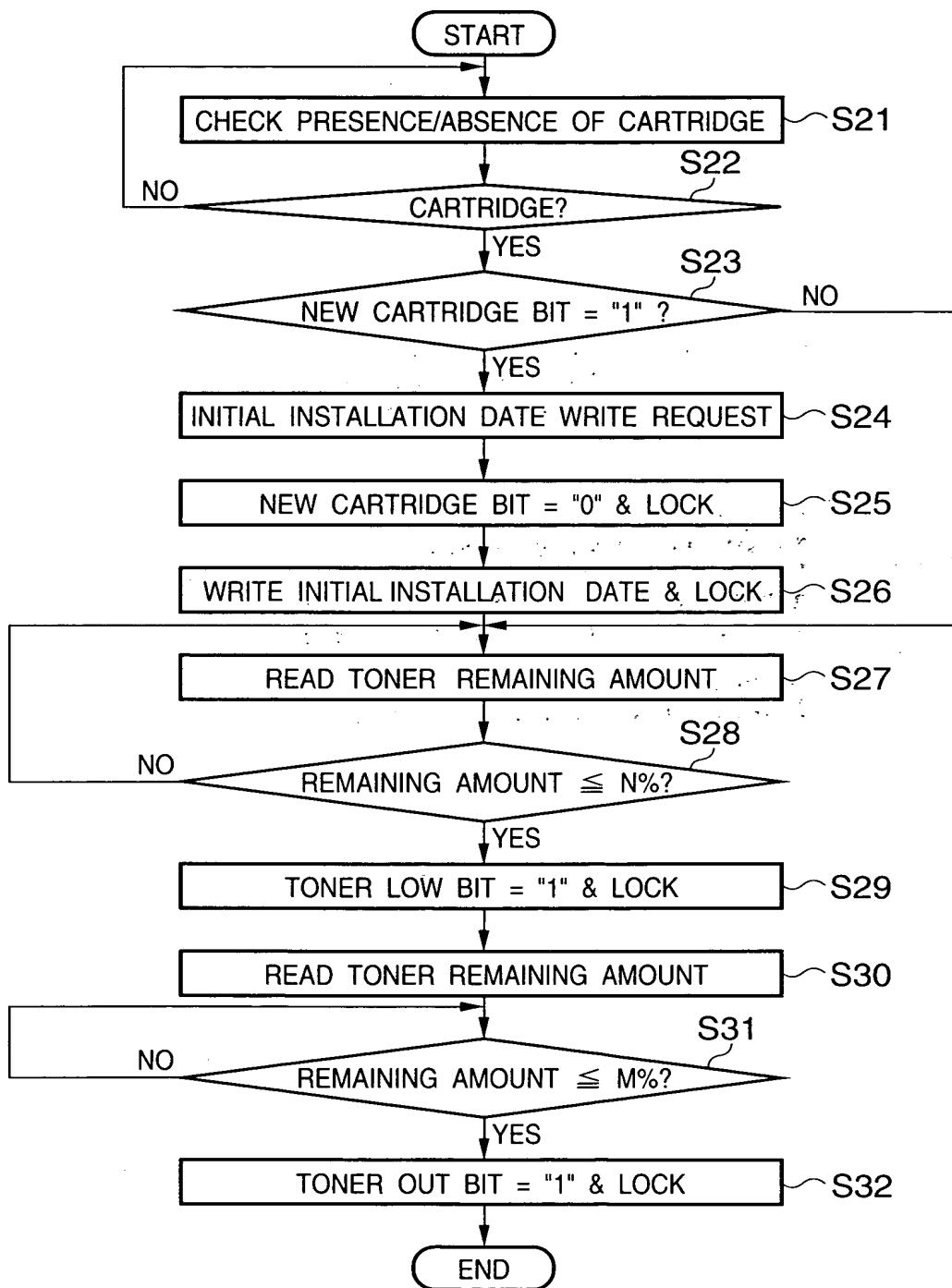


FIG. 14



## FIG. 15

ALL ADDRESS AREAS OF MEMORY  
(EACH 8BIT DATA)

ADDRESS	CONTENT
01h	NEW CARTRIDGE
02h	INITIAL INSTALLATION DATE
03h	TONER LOW
04h	TONER OUT
05h	RESERVED
06h	RESERVED
~	~
FDh	PAGE COUNT (UNLOCKED AREA)
FEh	USED AMOUNT OF DRUM CARTRIDGE (UNLOCKED AREA)
FFh	LOCK BIT AREA

THE CONTENT OF ADDRESS "FFh"

BIT	CONTENT
1st BIT	LOCK BIT OF ADDRESS "01h"
2nd BIT	LOCK BIT OF ADDRESS "02h"
3rd BIT	LOCK BIT OF ADDRESS "03h"
4th BIT	LOCK BIT OF ADDRESS "04h"
5th BIT	LOCK BIT OF ADDRESS "05h"
6th BIT	LOCK BIT OF ADDRESS "06h"
7th BIT	LOCK BIT OF ADDRESS "07h"
8th BIT	LOCK BIT OF ADDRESS "08h"